

INVESTIGATION OF MATERIALS FOR USE AS A MINE SEALANT/COATING, J. R. Carlson and W. P. Banks, Continental Oil Company, P. O. Box 1267, Ponca City, Oklahoma 74601.

The deterioration of rib-roof surfaces in coal mine entries which must be maintained for many years is a serious problem. A coating of sprayed urethane foam is known to effectively control deterioration in many cases, but at the same time poses a fire hazard. This paper presents an overview of recent work done with Consolidation Coal Company to find an effective, non-hazardous coating. Performance criteria are summarized for various mine conditions and are related to desired basic material properties. Results of laboratory and field tests on several types of materials using varied approaches to the problem are discussed. Comparisons are made on the safety, performance and economics of these materials.